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THE  
USE  
Of the  
ASTRONOMICAL  
Playing-Cards,

Teaching any ordinary Capacity by them to  
be acquainted with all the

STARS in HEAVEN,

To know their Place in Heaven, Colour,  
Nature, and Bigness.

As also the Poetical Reasons for every  
CONSTELLATION,

Very useful, Pleasant, and Delightful for all Lover,  
of INGENIETY.

---

By *Joseph Moxon* Hydrographer to the Kings most  
Excellent Majesty.

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L O N D O N.

The Playing-Cards, and these Books are  
Sold by *Joseph Moxon* on Ludgate-Hill at the Signe  
of Atlas, 1676.

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ASTRONOMICAL

TABLES

FOR THE USE OF THE

NAVY

AND THE ARMY

BY

JOHN FLAMSTEED

AND

JOHN BRADLEY

OF THE OBSERVATORY

AT GREENWICH

IN THE YEAR 1752

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JOHN BARNARD

AT THE OBSERVATORY

AT GREENWICH

( 1 )

OF THE

## Stars in HEAVEN:

**T**HE Stars are divided into six sorts or sizes, called Magnitudes, (which are you may see) distinguisht with six several sizes of Asterisks made like Stars, as set down in a Table on the Card over *Dorado*, whither I refer you.

Astronomers have computed the sizes of these Stars by comparing them either to the Diameter, or else to the whole Globe of the Earth. The Diameter of the Earth is 6872 of our common Miles, viz. Such Miles, as the whole Circumference of the Earth and Water makes 21600 Miles; allowing for every degree of the greatest Circle 60 Miles. Now the Diameter of a Star of the first Magnitude compared with the Diameter of the Earth hath such proportion to it as 19 hath to 4: therefore it containeth the Diameter of the Earth 4 times and  $\frac{3}{4}$ .

The Diameter of a Star of the second Magnitude is unto the Diameter of the Earth as 269 is to 60: therefore it containeth it  $4\frac{2}{3}$  times.

The Diameter of a fixed Star of the third Magnitude is unto the Diameter of the Earth as 25 unto 6: therefore it containeth it  $4\frac{1}{6}$  times.

The Diameter of a fixed Star of the fourth magnitude is unto the Diameter of the Earth as 19 unto 5: therefore it containeth it  $3\frac{4}{5}$  times.

The Diameter of a fixed Star of the fifth Magnitude

A /

tude is unto the Diameter of the Earth, as 119 unto 36, therefore it containeth it  $3\frac{1}{6}$  times.

The Diameter of a fixed Star of the sixth magnitude is unto the Diameter of the Earth, as 21 unto 8; therefore it containeth it  $\frac{5}{8}$  times.

As for the proportions of the cloudy and obscure Stars, they are not expressed, because they are but few, and of no great account in respect of their smallness.

*The proportions of the fixed Stars compared with the Globe of the Earth, are as follow.*

A Star of the first Magnitude is to the Globe of the Earth, as 6859 to 64, therefore it containeth the Globe of the Earth  $107\frac{1}{6}$  times.

A Star of the second Magnitude is to the Globe of the Earth, as 19465109 is to 216000, therefore it containeth it  $90\frac{1}{8}$  times.

A Star of the third Magnitude is to the Globe of the Earth, as 15625 is unto 216, therefore it containeth it  $72\frac{1}{3}$  times.

A Star of the fourth Magnitude is to the Globe of the Earth as 6850 is unto 125: therefore it containeth the Globe of the Earth  $54\frac{1}{2}$  times.

A Star of the fifth Magnitude is to the Globe of the Earth, as 1685159 is unto 46656, therefore it containeth the Globe of the Earth  $36\frac{1}{8}$  times.

A Star of the sixth Magnitude is to the Globe of the Earth as 9261 is unto 512, therefore it containeth the Globe of the Earth  $18\frac{1}{6}$  times.



I confesse all this may seem matter of incredulity to those whose understanding is swayed by their visual sense, because they cannot perhaps conceive it possible that the Heaven which appears so small to the bare eye should be able to contain so great a number of such great bodies as is here spoken of; yet if those be capable to consider the vast distance of this Heaven, and consequently of the Stars placed in it from the face of the Earth, and also the Diminutive quality of distance, their Reason will be rectified, and their incredulity turn'd into an acknowledgment of the unspeakable wisdom of Almighty God; and they will say with the Psalmist, *Great is our Lord, Great is his Power, his Wisdom is Infinite, Psal. 147. 5.*

The distance of the Stars therefore from the Earth, is according to Mr. *John Dee's* Computation, 20081  $\frac{1}{2}$  Semidiameters of the Earth. The Semidiameter of the Earth containeth of our common miles 3436  $\frac{1}{4}$ . Such miles as the whole Earth and Sea round about is 21600: allowing for every degree of the greatest Circle 60 miles, so that the distance of the Stars from the Earth is in miles 69006540, a distance so vastly great, that were there a path for a Foot-man to walk in of that length, he must have set forth 9452 years 347 days ago, and have travelled 20 miles every day to have been just now at his journies end.

Now as Mr. *Dee* saith (almost in the same words) if you weigh well with your self this little parcel of fruit Astronomical, as concerning the bigness and distance of the Stars, &c. and the huge massiness of the Starry Heaven, you will find your Consciences moved with the Kingly Prophet to sing the confession of Gods Glory; and say, *The Heavens declare the Glo-*

ry of God, and the firmament sheweth forth the works of his Hands.

### *Of the Constellations in Heaven.*

A Constellation is a certain number of Stars placed by God Almighty neer one another in Heaven, and by Astronomers circumscribed in one Figure depicted about them, as *Aries* the *Ram* is a Constellation, *Taurus* the *Bul* is another Constellation, &c. Astronomers brought them into these figures, for instructions sake, things cannot be taught without names, to give a name to every Star had been troublesome to the Matter, and for the Schollar; for the Master to devise, and for the Schollar to remember; and therefore the Astronomers have reduced many Stars into one Constellation, that thereby they may tell the better where to seek them, and being sought, how to express them. And they brought them into these figures, and none other, being moved thereto by these three Reasons: first these figures express some properties of the Stars that are in them; as those of the *Ram* to be hot and dry; *Andromeda* chained betokeneth imprisonment: the head of *Medusa* cut off, signifieth the loss of that part: *Orion* with his terrible and threatening gesture, importeth tempest, and terrible effects: The *Serpent*, the *Scorpion*, and the *Dragon* signifie poyson: The *Bull*, insinuateth a melancholly passion: The *Bear* inferreth cruelty, &c. Secondly, the Stars (if not precisely yet after a sort) do represent such a figure, and therefore that Figure was assigned them: as for example, the *Crown*, both North and South; the *Scorpion* and the *Triangle*, re-

present

present the Figures which they have. The third cause was the continuance of the memory of some notable men, who either in regard of their singular pains taken in Astronomy, or in regard of some other notable deed, had well deserved of man-kind.

The first Author of every particular Constellation is uncertain; yet are they of great antiquity; we receive them from *Ptolomy*, and he followed the *Platonicks*; so that their antiquity is great. Moreover we may perceive them to be ancient by the Scriptures, and by the Poets. In the 38 Chapter of *Job* there is mention made of the *Pleiades*, *Orion*, and *Arcturus*, and *Mazzaroth*, which some interpret the 12 Signs: *Job* lived in the time of *Abraham*, as *Syde-rocotes* maketh mention in his Book *de Commensurandis locorum distantis*.

Now besides all this, touching the reason of the invention of these Constellations the Poets had this purpose, viz. to make men fall in love with Astronomy: And to that intent have to every Constellation invented strange conceited stories; (as you may read hereafter, therein imitating *Demosthenes*, who when he could not get the people of *Athens* to hear him in a matter of great moment, and profitable for the Common-wealth, he began to tell them a tale of a fellow that sold an Ass; by which tale he so brought on the *Athenians*, that they were both willing to hear his whole Oration, and to put in practice what he exhorted them to. The like intent had the Poets in inventing of those stories: They saw that Astronomy being for its commodity singular in the life of man, was almost of all men utterly neglected: Hereupon they began to set forth that Art under

der Fictions, that thereby such as could not be perswaded by commodity, might by the pleasure be induced to take a view of these matters; and thereby at length fall in love with them. For commonly you shall note this, that he that is ready to read the stories, cannot content himself therewith, but desireth also to know the Constellation, or at leastwise some principal Star therein.

All the Constellations formerly notified by the Antients, were in number 48, because no more were seen in our Hemisphere, though in this latter Age there are 12 more discovered about the South Pole, which because it may be somewhat more pleasant for reading, and much more helpful for your memory, I shall give you their Names in plain English Rhythmes.

*The Constellations of the Fixed Stars:*

**T**He Army of the Starry Skie  
 Declares the Glory of God most high;  
 Seen and perceived of all Nations  
 In eight and forty Constellations.  
 First neer unto the Northern Pole  
 The *Dragon* and two *Bears* do role;  
 Whose hinder parts and Tails contain  
 The lesser and the greater Wain.  
 The *Hair*, the *Bear-ward*, and the *Crown*,  
 And then comes *Hercules* kneeling down.  
 And next below a place doth take  
 Great *Serpentarius* with his *Snake*.

Under

Under the *Harp* of *Orpheus*  
 The *Eagle* and *Antinous*.  
 The *Silver Swan* her Wings doth spread  
 Above the *Dart*, and *Dolphin's* head.  
 Then *Pegasus* comes on amain ;  
*Andromeda* follows in her Chain.  
 The *Triangle* below her stands ;  
 And at her feet in *Persus* hands  
 The *Gorgon's* head. Above are seen  
 Her Parents *Cepheus* , with his Queen  
*Cassiope*. Not far below  
*Heniochus* his *Goat* doth show  
 On his left shoulder : in his hand  
 He doth the stormy *Kids* command.

*Of the Zodiack.*

Here in the *Zodiack* begins  
 The *Ram*, the *Bull*, the *Loving Twins* ;  
 The *Crab*, the *Lion*, and *Virgin* tender,  
 The *Ballance*, *Scorpion*, and *Bow-bender* ;  
*Goat*, *Waterman*, then *Fishes* twain  
 Shall bring you round to th' *Ram* again.

Fifteen Images appear  
 In the *Southern Hemisphere*.  
 The *Monstrous Whale* before the rest,  
*Eridanus* scarce wets his brest :  
 Over the *Hare Orion* bright  
 Sparkles in a *Winters* night.  
 Then comes the great *Dog*, at whose tayl  
 The famous *Argo* spreads her sayl.  
 Above the little *Dog* doth flame,  
 For whom the *Latines* had no name :  
 Long *Hydra* on her tail alow  
 Carries the *Pitcher* and the *Crow*.



The *Centaure* holds the *Wolfe* by th'heel,  
 The *Altar*, and *Ixions* Wheel  
 Are never seen of us: but here  
 The *Southern Fish* brings up the rear.

*Southern Constellations.*

About the Southern Pole there be  
 Twelve Constellations we can't see,  
 Which *Frederick Hutman* did survey  
 Upon the Island *Sumatra* :  
 They'r call'd the *Crane*, the *Phoenix*, and  
 The *Indian*, with three Darts in's hand  
 The *Bird of Paradise* the *Fly*,  
 The *Peacock*, the *Camelion* fly,  
 The *South Triangle*, and *South Snake*,  
 The *Toucan Goose* with it's long Beak,  
 The *Flying Fish*, and *Dorado*:  
 Two *Magellanick Clouds* also.

*Of the Nature of the Stars.*

To many of the Principal Stars there is in Planetical Characters prefixed their Planetical Natures. The Astrologers make great use of them for knowing the nature of the Stars. for those Stars that have the character of  $\hbar$  adjoyned, are said to be of the nature of  $\hbar$ ; those that have  $\mathcal{U}$  adjoyned, are of the nature of  $\mathcal{U}$ , and so of the rest. If a Star have the characters of two Planets adjoyned, that Star participates of both their Natures, but most of that Planets whose character is first placed.

The use Astronomers make of those characters, is for knowing the colour of any Star; as if a Star have  $\hbar$  adjoyned, it is of the colour of  $\hbar$ ; if  $\mathcal{U}$ , it is the colour of  $\mathcal{U}$ , &c.

The

The fixed Stars are known from the Planets by their continual twinckling, for the Planets never twinckle, but the fixed Stars do.

*How you may learn to know all the Stars in  
Heaven by these Playing Cards.*

To each of these Cards I have set down the day of the moneth that the Constellation in it rises at the Time of Sun-setting, as also the point of the Compass it rises on, so that if you will observe it, when the Sun sets, you will see the Constellation rising upon that point of the Compass set down on the Card with the letters of the point of the Compass.

For Example.

If you would know when the *Little Dogg* rises in the Evening, look in the bottom of the Card, and you will find *Jan. 11. E. by N.* which shews that on the 11th. of *January* at Sun-set the Constellation of the *Little Dog* rises East and by North; therefore looking into that part of Heaven, you shall see the Constellation rising, and the Stars placed in Heaven, just as you find them placed on the Card. But if the Constellation be risen some considerable time, you must know the time since it rose, and estimate how high it may be above the Earth, by allowing about the twelfth part of Heaven for every hour since Sun-set, and about that esteemed height look for it, and when you find a number of Stars placed in Heaven like those on your Card, you may conclude that to be the Constellation, and to your great delight and satisfaction. See in what part of the Constellation each  
particu-

particular Star lies, and of what Nature, Coulour, and magnitude it is.

These Cards are divided into four Suits, as other playing Cards are, *viz.* Spades, Hearts, Diamonds, Clubs: And Astronomers have divided the whole face of Heaven into four Colures, *viz.*

The	{	Vernal	{	Colure, or	{	Spring,
		Æstival				Summer,
		Autumnal				Autumne,
		Hyemnal				Winter.

Because when the Sun comes to any of these Colures, the Season of the year alters into Spring, Summer, Autumn, Winter; and so have I divided these Cards; for all the Constellations that are in the Vernal Colure are known by the suit of Spades in the Æstival Colure are Hearts, in the Autumnal colure Diamonds, and in the Hyemnal Colure are Clubs, which are placed on the top at the left hand of every Card; and the number of each suit is marked on the top of the Card close by it with numerical letters thus, I, II, III, IV, V, &c. to X, and the Kings, Queens, and Knives of each suite are also depicted on the top in the middle of the Card.

### of Via Lactea, or the Milkyway

This Circle is not set down on the Cards, because it takes up the whole compass of Heaven, but it is so plain to be seen every clear Night, that it needs no picture:  
Yet

Yet I shall tell you what Constellations it passeth through, so that you may easily find any part of it that is above the Horizon when you please.

*VIA LACTEA*, or *Circulus Lacteus* by the Latines so called; and by the Greeks *Galaxia*, and by the English the *Milky way*. It is a broad white Circle that is seen in the Heaven: In the North Hemisphere, it beginneth at *Cancer*, on each side the head thereof, and passeth by *Auriga*, by *Perseus*, and *Cassiopeia*, the *Swan*, and the head of *Capricorn*, the tail of *Scorpio*, and the feet of *Centaur*, *Argo* the *Ship*, and so unto the head of *Cancer*. Some in a sporting manner do call it *Watling-street*, but why they call it so, I cannot tell except it be in regard of the narrowness that it seemeth to have, or else in respect of that great Highway that lyeth between *Dover* and *S. Albons* which is called by our men *Watling-street*.

Concerning this Circle as there are sundry opinions, so there is great difference among some writers, both touching the place, matter, and efficient cause thereof: *Aristot*'e dissenteth from all other, both Philosophers, and Poets, in the place, matter, and cause of this Circle; saying that it is a Meteor ingendered in the Air, made of the vapors of the earth, drawn up thither by the heat of the Sun, and there set on fire. But his opinion is of all men confuted.

First, touching the place, it cannot be in the Air: whatsoever is in the Air, is not seen of all men, at all times, to be under one and the same part of Heaven; If we see it in the South, they that are in the West shall see it under the East side of the Heaven; and they that are in the East, shall see it in the West part of the Heaven, but this Circle is of all men seen alwayes  
under

under the same part of Heaven, and to be joyned with the same Stars : therefore it cannot be in the Air.

Again, for the matter, it cannot be made of that which *Aristotle* nameth (*i. e.*) the vapours of the Earth, because of the long continuance of the thing, and that without any alteration : for it is impossible that any Meteor made of vapours drawn up from the Water, or exhalations from the Earth, should last so long; as may be sen in blazing Stars; which though they have continued long, as namely 16 moneths, some more, some less; yet at the length they have vanished away; whereas this Circle hath Continued from the beginning unto this day. Besides, put case it were made of these exhalations; Whence will they infer the uniformity thereof? The Comets do alter diversly, both in the fashion of their blazing, and also in there several quantities; whereas in this Circle there is nothing but the same part, alwayes of one form, and of one bigness. In the efficient cause thereof he must needs erre : for if it be neither in the Air, nor made of the exhalations of the Earth, it cannot be caused by the Sun; for the one is the place, and the other the matter, wherein, and whereupon the Sun sheweth his power.

All other (besides *Aristotle*) agree in the place, but differ in the efficient cause thereof : and they are either Philosophers, or Poets. Both these affirm that it is in the Firmament, (*i. e.*) in the eighth sphear; but they disagree in the cause thereof.

The Philosophers, (and chiefly *Democritus*) affirm the cause of the thing, to be the exceeding great number of Stars in that part of Heaven, whose beams meeting together so confusedly, and not coming distinctly



finctly to the eye, causeth us to imagine such a  
whiteness as is seen. But the best opinion is this,  
that this *Milky way* is a part of the Firmament, nei-  
ther so thin as the other parts thereof are, nor yet so  
thick as the Stars themselves. If it were as thin as  
the other parts of the Heaven besides the Stars, then  
could it not retain the light, but the light would pass  
through it and not be seen; if it were as thick as  
the Stars, then would the light be so doubled in it,  
that it would glister and shine, as the Stars themselves  
do: but being neither so thin as the one, nor so  
thick as the other, it becometh of that whiteness we  
see. Thus far Dr. Hood. But

Our modern Philosophers conceive this *Lactean*  
whiteness ariseth from a great number of little Stars  
contingate d in that part of Heaven, flying so swiftly  
from the sight of our eyes, that we can perceive no-  
thing but a confused light; this the *Telescope* (more  
lately found out) doth evidently demonstrate to us:  
by the benefit of which, little Stars (otherwise in-  
conspicuous to our eyes) are there clearly discerned.

About the Southern Pole are seen two white spots,  
like little Clouds, coloured like the *via Lactea*. One  
of which is trebble the latitude of the other; some Ma-  
riners call them *Nubeculae Magellani*.

Here

Here follows the

# ANCIENT STORIES

Of the several

Stars and Constellations.

Shewing the Poetical Reasons why  
such Various FIGURES are placed in

# HEAVEN.

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Collected from Dr. HOOD.

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And First,  
*of the Northern Constellations.*

**U**RSA MINOR. This Constellation hath the preheminance, because it is nearest of all the rest unto the North Pole; and is called of the *Greeks* *Arctos*, whercupon the Pole is called the Pole Artick, for that it is near unto this Constellation. It is also called *Helice minor*, because of the small Revolution which it maketh round about the Pole: or rather of *Elice*, a Town in *Arcadia*, wherein *Calisto* the great Bear, and Mother to the less, was bred. It is called  
Cyno-

*Cynosura*, because this Constellation, though it carry the name of a Bear, yet it hath the tail of a Dog: Last of all, it is termed *Phanice*, because that *Thales*, who first gave the name to this Constellation, was a *Phenician*: And therefore the *Phenicians* being taught how to use it in their Navigations, did call it by the name of the Country wherein *Thales* was born: It consisteth of Seven Stars, which the Latines call *Septentriones*, because by their continual motion those Seven Stars do as it were wear the Heaven. The *Spaniards* call them all *Bosina*, that is an *Horn*; because they may be very well brought into that form; whereof that which is the end of the tail is called the *Pole-Star*, by reason of the nearness thereof unto the Pole of the World; for it is distant (according to the opinion of most) from the true Pole, but 3 degrees 30 minutes. The *Arabians* call it *Alrukaba*: And of the *Scythians* it is said to be an *Iron nail*, and is worshipped by them as a God. The two stars that are in the shoulders of the *Bear*, are called the *Guards*, of the Spanish word *Guardare*, which is to behold; because they are diligently to be looked unto, in regard of their singular use which they have in Navigation.

The reason why this Constellation was brought into the Heavens is diversly set down, and first in this manner; *Saturn* having received of the Oracle that one of his Sons should banish him out of his Kingdom, determined with himself to kill all the Men-children that he should beget; whereupon he gave command to *Os* his Wife, being then great, that she should shew him the Child so soon as ever it was

B

born

born: But she bringing forth *Jupiter*, and being greatly delighted with his hair, gave the Child unto two Nymphs of *Crete*, dwelling in the Mount *Diète*, whereof this was one, and was called *Cynosura*, the other was *Helice*.

*Jupiter*, after that (according to the Oracle) he had bereft his Father of his Kingdom, in recompence of their paines and courtesie, translated them both into the Heavens, and made of them two Constellations, the *Lesser Bear*, and the *Greater Bear*.

Other some say, that it was *Arcas* the Son of *Calisto*, and they tell the Tale on this manner: *Calisto* a Nymph of singular beauty, Daughter to *Lycæon* King of *Arcadia*, induced by the great desire she had of hunting, became a follower of the Goddess *Diana*. After this, *Jupiter* being enamoured with her Beauty, and out of hope, by reason of her profession to win her love, in his own person, counterfeited the shape of *Diana*, lay with *Calisto*, and got her with Child, of whom was born a Son which was called *Arcas*. *Diana*, or rather *Juno*, being very much offended herewith, turned *Calisto* into a *Bear*. *Arcas* her Son at the age of fifteen, hunting in the Woods, by chance lighted upon his Mother in the shape of a *Bear*, who knowing her Son *Arcas*, stood still that he might come neer unto her, and not be afraid: but he fearing the shape of so cruel a Beast, bent his Bow of purpose to have slain her: whereupon *Jupiter* to prevent the mischief, translated them both into Heaven, and of them made two several Constellations: unto the *Lesser Bear* there belongs but one Star unformed.

2. *U R S A M A J O R*, the *Greater Bear*, called also so the Greeks *Arctos*, and *Helice*, consisteth of

27 Stars; Among the which, those seven that are in the hinder part and tail of the Bear are most observed; the Latines call them *Planiftrum*, and of our men they are called *Charles Wayn*; because the Stars do stand in such sort, that the three which are in the tail resemble the Horses, and the other four which are in the flank of the *Bear*, stand (after a manner) like the Wheels of a Waggon, or Chariot; and they are supposed by some to be greater than the Sun. The reason of the Translation of this Constellation into the Heaven, is at large set down in the other Constellation, and therefore needs not here to be repeated. This Constellation was first invented by *Nauplius*, the Father of *Palamedes* the Greek; and in great use among the Grecians; and this is to be noted both in this and the former Constellation, that they never set under the Horizon in any part of *Europe*: which though it fall out by reason of their situation in the Heavens; yet the Poets say, that it came to pass through the displeasure and hatred of *Juno*, who for that she was by *Calisto* made a Cuckquean, and they notwithstanding (as she took it) in despite of her, were Translated into Heaven, requested her Brother *Neptune*, that he should never suffer those Stars to set within his Kingdom, To which request *Neptune* condescended; so that in all *Europe* they never come near unto the Sea, or touch the Horizon. If any one marvel, that (seeing she hath the form of a *Bear*) she should have a tail so long; imagine that *Jupiter* fearing to come too nigh unto her teeth, did hold on her tail, and thereby drew her up into Heaven; so that she of herself being very weighty, and the distance from the Earth to the Heaven very great, there was great like-



lyhood that her tail must stretch. The Unformed Stars belonging to this Constellation are Eight.

3. *D R A C O*, the *Dragon*, of some named the *Serpent*; of others the *Snake*, by the *Arabians*, *Aben*, and by *Jundinus Florentinus*, *Urago*; because he windeth his tail round about the *Ecliptick Pole*; it containeth 31 Stars. This was the *Dragon* that kept the *Golden Apples* in the *Orchard* of the *Hesperides*, (now thought to be the *Islands* of *Cape de Virde*) and for his diligence and watchfulness, was afterwards *Translated* into *Heaven*: Yet others say that he came into *Heaven* by this occasion; when *Minerva* withstood the *Gyants* fighting against the *Gods*; they to terrifie her, threw at her a mighty *Dragon*, but she catching him in her hands, threw him presently up into *Heaven*, and placed him there, as a memorial of that her resistance. Others would have it to be the *Serpent Python*, whom *Apollo* slew, after the *Deluge*.

4. *C E P H E U S*, containeth in him 11 Stars, and hath two unformed. This was a *King* of the *Æthiopsians*, and *Husband* unto *Cassiopeia*, and *Father* of *Andromeda*, whom *Perseus* married: He was taken up into *Heaven*, with his *Wife* and *Daughter*, for the good *Deeds* of *Perseus* his *Son-in-Law*, that he and his whole stock might be had in remembrance for ever. The *Star* which is in his right shoulder is called by the *Arabians* *Alderabiein* (i. e.,) his right *Arm*.

5. *B O O T E S*, the *driver* of the *Oxen* (for so I suppose the name to signify, rather than an *Herdsmen*, for he hath not his name because he hath the care of any *Cattel*, but only because he is supposed to drive  
Charles

*Charles his Wain*, which is drawn by 3 Oxen ) he is al<sup>o</sup> so called *Arctophilax*, the keeper of the *Bear*, as though the care of her were committed to him: This Constellation consisteth of 22 Stars. Some will have *Bootes* to be *Arcas*, the Son of her who before was turned into the *Great Bear*; and they tell the Tale thus: *Lycaon* the Father of *Calisto*, receiving *Jupiter* into his house as a Guest, took *Arcas* his Daughters Son, and cut him in pieces; and among other Services, set him before *Jupiter* to be eaten; for by this means he thought to prove if his Guest were a God, as he pretended to be. *Jupiter* perceiving this heinous fact, overthrew the Table, fired the house with lightning, and turned *Lycaon* into a Wolf: but gathering, and setting together again the limbs of the child, he committed him to a Nymph of *Ætolia* to be kept: *Arcas* afterwards coming to mans Estate, and hunting in the Woods, lighted at un-awares upon his Mother, transformed by *Juno* into the shape of a *Bear*, whom he pursued into the Temple of *Jupiter Lycaeus*, whereunto by the Law of the *Arcadians*, it was death for any man to come. For as much therefore as they must of likelihood be both slain, *Calisto* by her Son, and he by the Law, *Jupiter* to avoid this mischief, of meer pitty took them both up into Heaven. Unto this Constellation belongeth but one Star unformed, and it is between the legs of *Bootes*, and by the *Grecians* it is called *Arcturus*, because of all the stars near the great *Bear* named *Arctos*, this star is first seen near her tail in the evening. The Poetical invention is thus.

*Icarus* the Father of *Erigone*, having received of the God *Bacchus* a Flagon of Wine, to declare how good

it was for mortal men, travelled therewith into the Territories of *Athens*, and there began to carouse with certain shepheards; they being greatly delighted with the pleasantness of the Wine, being a new kind of Liquor, began to draw so hard at it, that ere they left off, they were past one and thirty; and in the end, were faine to lay their heads to rest. But coming unto themselves again, and finding their brains scarce in good temper, they killed *Icarus*, thinking indeed that he had either poysoned them, or at the least wise made their brains intoxicate. *Erigone* was ready to dye for grief, and so was *Mera*, her little dog. But *Jupiter* to allay their grief, placed her Father in Heaven, between the legs of *Arctophila*.

6. *CORONA BOREA*, the Northern Garland, consisteth of Eight Stars; yet *Ovid* saith, that it hath nine. This was the Garland that *Venus* gave unto *Ariadne*, when she was Married unto *Bacchus*, in the Isle *Naxos*, after that *Theseus* had forsaken her: which Garland *Bacchus* placed in the Heaven; as a token of his love. *Novidius* will have it to be the Crown of the Virgin Mary.

7. *ENGONASIS*; This Constellation hath the name, because it is expressed under the shape of a man kneeling upon the one knee, and is therefore by the Latines called *Ingeniculum*. It containeth 29 Stars, and wanteth a proper Name, because of the great diversity of Opinions concerning the same. For some will have it to be *Hercules*, that mighty Conqueror, who for his 12 Labours was thought worthy to be placed in the Heaven, and nigh unto the *Dragon* whom he overcame. Others tell the tale thus: That  
when

when the *Tytans* fought against the *Gods*, they for fear of the *Gyants*, ran all unto the one side of the Heaven: whereupon the Heaven was ready to have fallen, had nor *Hercules* together with *Atlas*, set his neck unto it, and stayed the fall: and for his Desert, he was placed in Heaven.

8. *LYRA*, the *Harp*, it containeth 10 Stars, whereof thus goeth the Fable. The River *Nilus* swelling above his banks, over-flowed the Country of *Egypt*; after the fall whereof there were left in the fields divers kinds of living things, and amongst the rest a *Tortoise*; *Mercury*, after the flesh thereof was consumed, the sinews still remaining, found the same, and striking it, he made it yield a certain sound; whereupon he made an *Harp* like unto it, having Three strings, and gave it unto *Orpheus* the Son of *Cassiopea*. This *Harp* was of such excellent sound, that Trees, Stones, Fowls, and Wild Beasts are said to follow the sound thereof. After such time therefore that *Orpheus* was slain by the Women of *Ithrace*, the Muses by the good leave of *Jupiter*, and at the request of *Apollo*, placed this *Harp* in Heaven. *Novidius* will have it to be the *Harp* of *David*, whereby he pacified the Evil spirit of *Saul*. This Constellation was afterwards called *Vultur Cadens*, the falling Grype: and *Falco* the Falcon; or *Timpanum* the *Timbrel*.

9. *OLOR*, or *Cygnus* the *Swan*, called of the Chaldeans *Adigege*, it hath 17 Stars: of this Constellation the Poets Fable in this manner. *Jupiter* being overtaken with the love of *Leda* the Wife of *Tyndarus* King of *Oebalia*, and knowing no honest way to accomplish his desire, procured *Venus* to turn

her self into an *Eagle*, and himself he turned into the shape of a *Swan*. Flying therefore from the *Eagle*, as from his natural enemy, that earnestly pursued him, he lighted of purpose in the lap of *Lada*, and, as it were, for his more safety, crept into her bosome. The Woman not knowing who it was under that shape, but holding (as she thought) the *Swan* fast in her arms, fell asleep. In the mean while *Jupiter* enjoyed his pleasure, and having obtained that he came for, betook him again unto his wings; and in memorial of his purpose (attained under that form) he placed the *Swan* among the Stars.

*Ovid* calleth this Constellation *Milvius*, the *Kite*, and telleth the Tale thus. The Earth being greatly offended with *Jupiter*, because he had driven *Saturn* his Father out of his Kingdom, brought forth a monstrous *Bull*, which in his hinder parts was like a Serpent; and was afterwards called the *Fatal Bull*, because the *Destinies* had thus decreed, that whosoever could slay him, and offer up his Entrails upon an Altar, should overcome the eternal Gods. *Briareus* that mighty Gyant, and ancient enemy of the Gods, overcame the *Bull*, and was ready to have offered up his Entrails according to the decree of the *Destinies*: but *Jupiter* fearing the event, commanded the Fowls of the Air to snatch them away: which although to their power they endeavoured, yet there was none of them found so forward and apt to that action as the *Kite*, and for that cause he was accordingly rewarded with a place in Heaven. Some call this Constellation *Orvis*, that is, the *Bird*: others call it *Vultur volans*, the *Flying Grype*: It is called *Gallina*, the *Hen*. Unto this Constellation do belong two unformed Stars.



10. *CASSIOPEIA*, She consisteth of 13 Stars. This was the Wife of *Cepheus*, and the mother of *Andromeda*, whom *Perseus* married, and for his sake was translated into Heaven, as some write. Others say that her beauty being singular, she waxed so proud, that she preferred her self before the *Nereides*, which were the *Nymphs* of the *Sea*: for which cause, unto her disgrace, and the example of all others that in Pride of their hearts would advance themselves above their betters, she was placed in the Heaven with her head as it were downwards; so that in the revolution the Heavens she seemeth to be carried head-long.

11. *P E R S E U S*, he hath 26 Stars. This was the Son of *Jupiter*, whom he in the likeness of a *Golden-shower* begat upon *Danae*, the daughter of *Acrisius*. This *Perseus* coming unto mans estate, and being furnished with the Sword, Hat, and Wings of his brother *Mercury*, and the Shield of his Sister *Ninerva*, was sent by his Foster-father *Polidectes*, to kill the Monster *Medusa*, whom he slew; and cutting off her head, carried it away with him: But as he was hastening homewards, flying in the Air, he espied *Andromeda* the daughter of *Cepheus* and *Cassiopea*, for the pride of her mother, bound with a Chain unto a Rock, by the Sea side, there to be devoured by a Whale: *Perseus* taking notice and pity of the case undertook to fight with the Monster, upon condition that *Andromeda* might be his Wife, to be short, he delivered *Andromeda*, married her, and returning homeward unto the Isle *Seriphus*, he found there his Grand-father *Acrisius*, whom by mischance and unadvisedly he slew with a quoit: (or as *Ovid* reporteth) with the terrible fight the horrible head of *Medusa* not knowing that it was his

his Grand-father : but afterwards understanding whome he had slain, he pined away through extreame sorrow: whereupon *Jupiter* his father pitying his grief, took him up into Heaven : and there placed him in that form wherein he overcame *Medusa*, with the Sword in one hand, and the head of *Medusa* in the other, and the Wings of *Mercury* at his Heels. This Constellation because of the unluckiness there of is called by Astrologers *Cacodemon* (i.e.) *Unlucky*, and *Unfortunate*. For (as they say) they have observed it that whatlover is born under this Constellation, having an evil aspect, shall be stricken with Sword, or lose his Head. *Novidius* saith that it is *David* with *Goliath* his head in one hand, and his Sword in the other. The unformed Stars belonging unto this Constellation, are three.

12. *AURIGA*, the Waggoner, or Carter : he consisteth of 14 Stars : the *Arabians* call him *Alaiot*; the *Greeks* *Heniochus*, (i.e.) a man holding a bridle in his hand, and so is he pictured. *Eratosthenes* affirmeth him to be *Erichonius* King of *Athens*, the son of *Vulcan* : who having most deformed feet, devised first the use of the waggon or Chariot, and joyned horses together to draw the same, to the end that he sitting therein, might the better conceal his deformities. For which invention, *Jupiter* translated him into the Heavens.

In this Constellation there are two other particular Constellations to be noted; whereof the one consisteth but of one Star alone, which is in the left-shoulder of *Auriga*, and is called *Hircus*, or *Capra* the Goat; the *Arabians* call it *Alhajoth* : The other consisteth of two little Stars a little beneath the others, standing

standing as it were in the hand of *Auriga*; this Constellation is called *Hedi*, the *Kids*. The tale is thus; *Saturn* (as you heard before) had received of the Oracle, that one of his Sons should put him out of his Kingdom, whereupon he determined to devour them all: *Ops* by stealth conveyed away *Jupiter*, and sent him to *Melissus* King of *Cete*, to be nourished. *Melissus* having two daughters, *Amalthea* and *Melissa*, committed *Jupiter* unto their Nursery; *Amalthea* had a *Goat* that gave suck unto two *Kids*, so that by the milk of this *Goat*, she nourished *Jupiter* very well. To requite this her care and courtelie, *Jupiter* (after he had put his Father out of his Kingdom) translated her *Goat* and her two *Kids* into Heaven; and in remembrance of the Nurse, the *Goat* is called *Capra Amalthea*. *Novidius* saith, that when Christ was born, and his birth made manifest by the Angels unto the Shepherds, one of them brought with him for a Present, a *Goat* and two young *Kids*; which in token of his good will, were placed in Heaven.

13. *OPHIUCHUS*, or *SERPENTARIUS*, That is, the *Serpent bearer*. This Constellation hath no proper name, but is thus entituled, because he holdeth a *Serpent* in his hands. It containeth 24 Stars. Some say that it is *Hercules*, and report the tale on this manner. *Juno* being a great enemy to *Hercules*, sent two Snakes to kill him as he lay sleeping in his Cradle: but *Hercules* being a lusty Child (for *Jupiter* had spent two daies in begetting him) without much ado strangled them both: In memorial of so strange an event, *Jupiter* placed him in the Heavens, with a *Serpent* in his hands.

14. *SERPENS*, the *Serpent* of *Ophiuchus*, which

which consisteth of 18 Stars. Some say that it is one of the Serpents that should have slain *Hercules* in his Cradle. *Novidius* saith, it is the *Viper* that bit *Paul* by the hand. Others deliver the tale in these words; *Glancus* the son of *Minos* King of *Crete*, was by misfortune drowned in a Barrel of Honey: *Minas* his Father craved the help of *Æsculapius* the Physician: and that he might be driven perforce to help the Child, he shut him up in a secret place, together with the dead Carcass: whiles *Esculapius* stood in a great maze with himself what were best to be done, upon a sudden there came a Serpent creeping towards him; the which Serpent he slew with the staff which he had in his hand. After this there came another Serpent in, bringing in his mouth a certain herb, which he laid upon the head of the dead Serpent, whereby he restored him unto life again. *Esculapius* using the same herb, wrought the same effect upon *Glancus*. Whereupon (after that) *Esculapius* (whom some affirm to be *Ophincus*) was placed in the Heaven and the Serpent with him.

15. SAGITA, or *Telum*; the Arrow or Dart. This was that Arrow wherewith *Hercules* slew the Eagle or Grype that fed upon the Liver of *Prometheus* being tyed with Chains to the top of mount *Caucasus*, and in memorial of that deed, was translated into Heaven. Others will have it to be one of those Arrows which *Hercules* at his death gave unto *Phylodetes*, upon which the Destiny of *Troy* did depend. The whole Constellation containeth five Stars.

16. AQUILA, the Eagle, which is called *Vultur Volans*, the flying Grype. It hath in it 9 Stars. The Poetical reason of this Constellation, is this; *Jupiter* trans-

transforming himself into the form of an *Eagle* took *Ganimes* the *Trojan Boy*, whom he greatly loved up into Heaven, and therefore in sign thereof: (because by that means he performed his purpose) he placed the figure of the *Eagle* in Heaven. There belong unto this Constellation 6 Stars (before time) unformed but now brought into the Constellation of *Antinous*: But whereupon that name should come, I know not, except it were that some man devised it there to curry favour with the Emperour *Adrian*, who loved one *Antinous Bithynicus* so well, that he builded a Temple in his honour at *Mantineæ*.

17. DELPHINUS, the *Dolphin*: it containeth 10 Stars; yet *Ovi* in his second Book *de Fastis*, saith that it hath but nine. Neither did the ancient Astronomers attribute unto it any more, according to the number of the *Muses*; because of all other Fishes the *Dolphin* has said to be delighted with Musick. The Tale goeth thus concerning this Constellation. When *Neptune* the God of the Sea greatly desired to match with *Amphitrite*, she being very modest and shame-faced, hid her self; whereupon he sent many messengers to seek her out, among whom, the *Dolphin* by his good hap, did first find her; and perswaded her also to match with *Neptune*: For which his good and trusty service, *Neptune* placed him in the Heavens.

Others say, that when *Bacchus* had transformed the Marriners that would have betrayed him, into *Dolphins*, he placed one of them in Heaven, that it might be a lesson for others to take heed how they carried any one out of his way, contrary both to his desire, and their own promise. *Nepidius* referreth this



this Constellation unto the Fish that saved *Jonas* from drowning.

18. *EQUICVLVS*, is the little Horse, and it consisteth of 4 Stars. This Constellation is named almost of no Writer, saving *Ptolomeus*, and *Alphonsus* who followed *Ptolomy*, and therefore no certain Tale or History is delivered thereof by what means he came into Heaven.

19. *EQUUS ALATUS*, the *Winged Horse*, or *Pegasus*, it containeth 26 Stars. This Horse was bred of the blood of *Medusa*, after that *Perseus* had cut off her head, and was afterwards taken and tamed by *Bellerophon*, whiles he drank of the River *Pirene* by *Corinth*, and was used by him in the conquest of *Chimera*: after which exploit *Bellerophon*, being weary of the earthly affairs, endeavoured to fly up into Heaven. But being amazed in his flight, by looking down to the earth; he fell from his Horse, *Pegasus* notwithstanding continuing his course (as they feign) entred into Heaven, and there obtained a place among the other Constellations.

20. *ANDROMEDA*, She consisteth of 23 Stars; but one of them is common both unto her and *Pegasus*. This was the daughter of *Cepheus* and *Cassiopeia*, and the Wife of *Perseus*; the reason why *Minerva*, or *Jupiter* placed her in the Heavens, is before expressed. *Novidius* referreth this Constellation unto *Alexandria* the *Virgin*, whom *S. George* through the good help of his Horse delivered from the *Dragon*.

21. *TRIANGULUM* the *Triangle*, called also *Deloton*, because it is like the fourth letter of the Greek Alphabet  $\Delta$ , which they call *Delta*; it consisteth

fifteth of four stars. They say it was placed in Heaven by *Mercury*, that thereby the head of the *Ram* might be the better known. Others say, that it was placed there in honour of the *Geometricians*, among whom, the Triangle is of no small importance. Others affirm, that *Ceres* in times past requested *Jupiter* that there might be placed in Heaven some Figure representing the form of *Scicily*, an *Island* greatly beloved of *Ceres*, for the fruitfulness thereof: now this *Island* being triangular (at her request) was represented in the Heaven under that form.

Thus much concerning the Constellations of the Northern Hemisphere. Now follow the Poetical Stories of the Constellations of the Southern Hemisphere.

Secondly,

### Of the Southern Constellations.

**CETUS**, the *Whale*, it is also called the *Lyon*, or *Bear* of the *Sea*. This is that monstrous fish that should have devoured *Andromeda*, but being overcome by *Perseus*, was afterwards translated into Heaven by *Jupiter*, as well for a token of *Perseus* his manhood, as for the hugeness of the fish it self. This Constellation consisteth of 22 Stars.

2. **ORION**, this hath 38 Stars. The Poetical reason of the translation into the Heavens, shall be shewn in the *Scorpion*, amongst the *Zodiacal* Constellations. The Ancient Romans called this Constellation *Jugala*: because it is most pestiferous unto Cattel and as it were the very cut-throat of them. There are

are bright Stars in his girdle, which we commonly call our *Ladies yard*, or *wand*. *Novidius*, applying this sword of *Orion* unto Scripture, will have it to be sword of *Saul*, afterwards called *Paul*, where-with he persecuted the Members of *Christ*: which after his conversion was placed in Heaven. In his left shoulder there is a very bright Star, which in Latine is called *Bellatrix* the *Warriour*, in the *Fæminine Gender*. I cannot find the reason except it be this; that Women born under this Constellation shall have mighty tongues: the reason of the *Ox hide* which he hath in his hand may be Gathered out of the next story.

3. *FLUVIUS*, the *River*; it comprehendeth 34 Stars. It is called by some *Eridanus*, or *Pagus*; they say that it was placed in Heaven in remembrance of *Phaeton*, who having set the whole earth on fire by reason of misguiding of his Father *Phæbus* his *Chariot*, was slain by *Jupiter* with a thunder-bolt, and tumbling down from Heaven, fell into the River *Eridanus*, or *Padus*, which the *Italians* call *Po*. Others say that it is *Nilus*, and that that figure was placed in Heaven because of the excellency of that River, which by the Divines is called *Gibon*, and is one of the Rivers of *Paradice*. Others call it *Flumen Orionis* the flood of *Orion*; and say, that it was placed there to betoken the off-spring from whence *Orion* came for the tale is thus reported of him.

*Jupiter*, *Neptune*, and *Mercury*, travelling upon the Earth in the likeness of Men, were requested by *Hyreus* to take a poor lodging at his House for a Night: they being overtaken with the evening, yeilded unto his request; *Hyreus* made them good cheer, killing

killing an *Ox* for their better entertainment : The Gods seeing the good heart of the old man, willed him to demand what he would in recompence of his so friendly cheer. *Hierus* and his Wife being old, requested the Gods to gratifie them with a Son. They to fulfil his desire, called for the hide of the *Ox* that was slain, and having received it, they put it into the Earth, and made water into it all three together, and covering it, willed *Hyreus* within ten moneths after to dig it out of the Earth again; which he did, and found therein a Man-child; whom he called *Ourion*, *ab Urina*, of piss; although afterwards by leaving out the second letter, he was named *Orion*. At such time therefore as he was placed in Heaven, this flood was joyned hard to his heels, and the *Ox* hide wherein the Gods did piss, was set in the left hand, in memorial of his Off-spring.

4. *LEPUS*, the *Hare*, which consisteth of 12 Stars. This Constellation was placed in Heaven between the legs of *Orion*, to signifie the great delight in hunting which he had in his life time : but others think it was a frivolous thing, to say that so notable a follow as *Orion* would trouble himself with so small and timerous a beast as the *Hare* : and therefore they tell the tale thus.

In times past there was not a *Hare* left in the Isle *Leros* : a certain youth therefore of that Island, being very desirous of that kind of beast, brought with him from another Country thereabout, an *Hare* great with young; which when she had brought forth, they in time became so acceptable unto the other Country men, that every one almost desired to have and keep a *Hare*, By reason whereof, the number of them

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grew

grew to be so great, within a short space after, that the whole Island became full of *Hares*, so that their Masters where not able to find them meat: whereupon the *Hares* breaking forth into the fields, devoured their Corn. Wherefore the Inhabitants being bitten with hunger, joyned together with one consent, and (though with much ado) destroyed the *Hares*. *Jupiter* therefore placed this Constellation in the Heavens, as well to expresse the exceeding fearfulness of the Beast, as also to teach men this lesson, that there is nothing so much to be desired in this life, but that at one time or another bringeth with it more grief than pleasure. Some say, that it was placed in Heaven at the request of *Ganimedes*, who was greatly delighted with hunting the *Hare*.

5. CANIS MAJOR, the Great Dog, it consisteth of 18 Stars. It is called *Sirius Canis*, because he causeth a mighty drought by reason of his heat. This is the Constellation that giveth the name unto the *Canical* or *Dog days*; whole beginning and end is not alike in all places, but hath a difference according to the Country and Time: as in the Time of *Hippocrates* the Physitian, who lived before the time of Christ 200 years, the *Canicular* dayes began the 13 or 14 of *July*. In the time of *Avicenna*, the *Spaniard*, who lived in the year of our Lord 1100. the *Canicular* days began the 15, 16, or 17 of *July*. In our Country, they begin about *St. James-tide*, but we use to account them from the 6 of *July*, to the 17 of *August*; which is the time when the Sun beginneth to come near unto and to depart from this Constellation.

*Novidius* will have it to be referred to *Tobias Dog*; which may very well be, because he hath a tail; *Tobias*



*bias* Dog had one; as a certain fellow once concluded: because it is written that *Tobias* his Dog fawned upon his Master, therefore it is to be noted (said he) that he had a tail. The Poets say, that this is the Dog whom *Jupiter* set to keep *Europa*, after he had stolen her away, and conveyed her into *Creet*, and for his good service was placed in Heaven. Others say, that it was one of *Orion* his Dogs. There belong unto this Constellation 11 Stars unformed.

6. CANIS MINOR, the *Lesser Dog*; this of the Greeks is called *Procyon*, of the Latines *Ante Canis*; it containeth but two Stars. Some say, that this was also one of *Orions* Dogs. Others rather affirm it to be *Mera* the Dog of *Origone*, or rather of *Icarus* her Father, of whom mention is made in the Constellation of *Bootes* and *Virgo*. This Dog of meer love to his Master, being slain, as aforesaid, threw himself into the River *Anygrus*, but was afterward translated into Heaven, with *Origone*. Among the Poets there is great dissention which of the two should be the Dog of *Origone*; some saying one, and some the other, and therefore they do many times take the one for the other.

7. ARGO NAVIS, the *Ship Argo*, which comprehendeth 41 Stars; this is the Ship wherein *Jason* did fetch the Golden Fleece from *Colchis*, which was afterward placed in Heaven as a memorial, not only because of the great Voyage, but also, because (as some will have it) it was the first Ship wherein any man sailed. Their reason why this Ship not is made whole is, that thereby men might be put in mind not to despair, albeit that their Ship miscarry in some part now and then: some avouch it to be the *Ark* of

No. *Novidius* saith it is the Ship wherein the *Apostles* were, when Christ appeared unto them walking on the Sea. In one of the *Oars* of this Ship there is a great Star, called *Canopus*, or *Canobus*, which the *Arabians* called *Shuel*, as it were a bone-fire, because of the greatness thereof. It is not seen in *Italy*, nor in any Country on this side of *Italy*: Some say that *Canobus* the Master of *Menelaus* his Ship was transformed into this Star.

8. HYDRA, the *Hydre*, that hath 25 Stars, and two unformed,

9. CRATER, the *Cup* or *standing peice*; that hath seven Stars, some say that this was the Cup wherein *Tagathon*, that is the chiet God, mingled the stuff whereof he made the souls of Men.

10. CORVUS, the *Crow*; this hath seven Stars. These 3 Constellations are to be joyned together, because they depend upon one History, which is this. Upon a time *Apollo* made a solemn feast to *Jupiter*, and wanting water to serve his turn, he delivered a Cup to the *Crow* (the bird wherein he chiefly delighted) and sent him to fetch water therein. The *Crow* flying towards the River, espied a Fig-tree, fell in hand with the Figs, and abode there till they were ripe: In the end, when he had fed his fill of them, and had satisfied his longing, he bethought himself of his errand, and by reason of his long delay, fearing a Check, he caught up a snake in his bill, brought it to *Apollo*, and told him that the snake would not let him fill the Cup with water. *Apollo* seeing the impudency of the bird, gave him this gift, that as long as the Figs were not ripe upon the Tree,

Tree so long he should never drink : and for a memorial of the silly excuse that he made, he placed both the *Crow*, *Cup*, and *Snake*, in Heaven.

11. **CENTAURUS**, the *Centaure*, which comprehendeth 37 Stars. Some say, that this is *Typhon*, others call him *Chiron*, the Shoolmaster of those three excellent men, *Hercules*, *Achilles*, and *Æsculapius* : unto *Hercules* he read *Astronomy*, he trained *Achilles* in *Musick*, and *Æsculapius* in *Physick* : and for his upright life he was turned into this Constellation, Yet *Virgil* calleth *Sagittarius* by the name of *Chiron*. In the hinder feet of this Constellation, those Stars are set which are called the *Crofters*, appearing to the Marriners as they sail towards the South Sea, in the form of a Cross, whereupon they have their name. The four Stars which are in the Garnish of the *Centaurs* Spear, are accounted by *Proclus* as a peculiar Constellation, and are called by him *Thyrifloebus* which was a Spear compassed about with vine leaves: but they are called by *Copernicus* and *Clavius*, and other Astronomers, the Stars of his Target. It should seem that they were deceived by the old translation of *Ptolomy*, wherein *Scutum* is put for *Hista* (i.e.) the Target, for the Spear, as it is well noted by our Country-man M. R. *Record*, in this Book intituled *The Castle of Knowledge*.

12. **LUPUS**, the *Wolf*, or the beast which the *Centaur* holdeth in his hand, containeth 19 Stars ; the Poetical reason is this, *Chiron* the *Centaur* being a just man, was greatly given to the worship of the Gods : for which thing, that it might be notified to all posterity, they placed him by this beast, which he seemeth to stick and thrust through with his

Spear ( as it were ) ready to kill for sacrifice.

13. A R A, the *Altar*, it is also called *Lar*, or *Thuribulum* (i. e.) a Chimney with the fire, or a Censur. It consisteth of seven Stars, and is affirmed. of some Poets, to be the *Altar* whereon the *Centaur* was wont to offer up his sacrifice. But others tell the tale thus. When as the great Gyants called the *Tytans*, laboured as much as might be to pull *Jupiter* out of Heaven, the Gods thought it good to lay their heads together, to advise what was best to be done: Their conclusion was, that they should all with one consent joyn hands together to keep out such fellows; and that this their league might be confirmed, and throughly ratified, they caused the *Cyclops* (which were workmen of *Vulcan*) to make them an *Altar*: about this *Altar* all the Gods assembled, and there sware, that with one consent they would withstand their enemies; afterwards, having gotten the Victory it pleased them to place this *Altar* in Heaven as a memorial of their League, and a token of that good which unty doth breed.

14. CORONA AUSTRINA, the *South Garland*, it hath 13 Stars. Some say that it is some trifling *Garland* which *Sagittarius* was wont to wear, but he cast it away from him in jest, and therefore it was placed between his legs; others call it the Wheel of *Ixon*, whereupon he was tormented for that great discourtesie he would have offered unto *Juno*, thinking indeed to have gotten up her belly: but *Jupiter* seeing the impudency of the man, tumbled him out of Heaven (whereby the licence of the Gods he was sometimes admitted as a guest) into Hel there to be continually tormented upon a Wheel:

The

The Figure of which Wheel was afterwards placed in Heaven, to teach men to take heed how they be too saucie to make such courteous proffers unto other mens wives. The Greeks call this Constellation by the name of *Uraniscus*, because of the Figure thereof: For it representeth the palate or roof of the mouth, which they call *Uraniscus*.

15. The last is *PISCIS AUSTRINUS*, or *Notius*, the *South-Fish*, which comprehendeth 11 Stars, besides that which is in the mouth thereof, belonging to the water, which runneth from *Aquarius*, and is called by the Arabians *Fomahant*. The reason why this *Fish* was placed in the Heaven, is uncertain: yet some affirm, that the daughter of *Venus* going into a water to wash her self, was suddenly transformed into a fish the which Fish was afterwards translated into Heaven. The unformed Stars belonging unto this Constellation are six.

*Thus much concerning the Constellation of the Northern and Southern Hemispheres; now follow the Poetical Stories of the Zodiaticall Constellations.*

Thirdly,

### *Of the Zodiaticall Constellations.*

1. **A**RIES, the *Ram*, it is called by the Greeks *Crios*, it containeth in it 13 Stars, which were brought unto this Constellation by *Thyestes*, the son of *Pelops*, and brother of *Acreus*. This is the *Ram*, upon which *Phrixus*, and *Helle* his sister, the children of *Athamas* did sit, when they fled from their step-mother



*Ino*, over the Sea of *Hellespont*: which *Ram* was afterwards for his good service, translated into Heaven by *Jupiter*. Others say, that it was that *Ram* which brought *Bacchus* unto the spring of water, when through drought he was likely to have perished in the desert of *Lybia*. *Novidius* will have this to be the *Ram*, which *Abraham* offered up instead of his son *Isaac*. The Star that is first in the head of the *Ram*, is that from whence our later Astronomers do account the Longitude of all the rest, and it is distant from the head of *Aries*, in the tenth Sphere, 27 degrees 53 minutes. The unformed Stars belonging unto this Constellation, are five.

2. *T A U R U S*, the *Bull*, which consisteth of 23 Stars. This was translated into Heaven in memorial of the rape committed by *Jupiter* on *Europa* the daughter of *Agenor*, King of *Sidon*; whom *Jupiter* in the likeness of a white Bull stole away, and transported into *Candia*. Others say, That it was *Io* the daughter of *Inachus*: whom *Jupiter* loved, and turned into the form of a Cow, to the intent that *Juno* coming at unawares, should not perceive what a part he had played: *Jupiter* afterward in memorial of that crafty conveyance, placed that Figure in Heaven; The reason why the Poets name not certainly whether it be a Cow or a Bull, is because it wanteth the hinder parts; yet of the most of them it is called a *Bull*. In the Neck of the *Bull* there are certain Stars standing together in a cluster, which are commonly called the *Seven Stars*; although there can hardly be discerned any more then six, these are reported to be the seven daughters of *Atlas*, called *Atlantiades*, whereof six had company with the immortal Gods, but the seventh (whose

(whose name was *Merope*) being married unto *Sisyphus* a mortal man, did therefore withdraw and hide her self, as being ashamed that she was not so fortunate in matching her self as her sisters were. Some say, that that star which is wanting is *Electra*, the eldest Daughter of *Atlas*, and that therefore it is so dim, because she could not abide to behold the destruction of *Troy*; but at that time and ever since, she hid her face. The reason why they were taken up into Heaven, was their great pity towards their Father, whose mishap they bewailed with continual tears. Others say, that whereas they had vowed perpetual virginity, and were in danger to lose it, by reason of *Orion*, who greatly assailed them, being overtaken with their love; they requested *Jupiter* to stand their friend; who translated them into Stars, and placed them in that part of Heaven. The Poets call them *Pleiades*, because when they rise with the Sun, the Mariners may commit themselves to the Sea. Others will have them to be so termed *a pluendo*, because they procure rain. Others give them this name, of the Greek word *Cleiones*, because they be many in number. they be also called *Virgilie*, because they rise with the Sun in the *Spring time*: likewise *Aethorae*, because they stand so thick together. Our men call them by the name of the *seven Stars*, or *Brood Hen*. The Astronomers note this as a special thing concerning these stars, that when the Moon and these stars do meet together, the eyes are not to be medled withal, or cured if they be sore: their reason is, because they be of the nature of *Mars* and the *Moon*.

Moreover, there be five stars in the face of the *Bull* representing the form of the *Roman* letter V, whereof  
one

one (which is the greatest) is called the *Bull's Eye*, They be called *Hyades*, and were also the daughters of *Atlas*, who so long bewailed the death of *Hyas* their Brother, slain by a *Lyon*, that they died for sorrow, and were afterwards placed in Heaven, for a memorial of that great love they bear to their brother. The ancient *Romans* call the *Bull's Eye* *Parilicium*, or *Palelicium*; of *Pales* their Goddess; whose feast they celebrated after the conjunction of this Star and the Sun. The unformed Stars belonging unto this Constellation, are eleven:

3. GEMINI, the *Twins* consisteth of 18 stars. The Poets say, they are *Castor* and *Pollux*, the sons of *Leda*, brethren most loving, whom therefore *Jupiter* translated into Heaven. Some say that the one of them is *Apollo*, and the other *Hercules*: but the most affirm the former. The unformed Stars of this Constellation are seven, whereof one is called *Tropus*, because it is placed next before the foot of *Castor*.

4. CANCER, the *Crab*, it hath 9 Stars. This is that *Crab* which bit *Hercules* by the heel as he fought with the Serpent *Hydra* in the Fen *Lerna*; and for his forward service, was placed in Heaven by *Juno*, the utter enemy of *Hercules*. In this Constellation there are Stars much spoken of by the Poets; although they be but small; whereof one is called the *Crib*, other two are the two *Asses*, whereof one was the *Ass* of *Bacchus*, the other of *Vulcan*, whereon they rode to battel, when as the Gyants made war with the Gods; with whose braying and strange noise, the Gyants were so scared upon the sudden, that they forsook the field, and fled. The Gods getting the Victory, in triumphing manner translated both the *Asses*, and

and their manger into Heaven. The unformed Stars of this Constellation are four. It is called *animal Retrogradum*, for when the Sun cometh into this Sign, he maketh Retrogradation.

5. LEO, the *Lyon*; it hath 27 Stars, this is that *Lyon* which *Hercules* overcame in the wood *Nemaa*, and was placed in Heaven in remembrance of so notable a deed. *Novidius* saith, this was one of the *Lions* which were in the den into which *Daniel* was cast, and was therefore placed in Heaven, because of all other he was most friendly unto *Daniel*. In the breast of this Constellation is that notable great Star, the light whereof is such, as that therefore it is called by Astronomers *Bazileus* or *Regulus* (i.e.) the *Viceroy*, or little King among the rest. The unformed Stars belonging to the *Lyon* are eight; whereof three make the Constellation which is now called *Coma Berenices*, that is, the hair of *Berenice*. This Constellation was first found out and invented by *Canon* the Mathematician, but described by *Calimachus* the Poet. The occasion of the story was this. *Ptolomeus Evergetes* having married his sister *Berenice*, was shortly after enforced to depart from her, by reason of the Wars he had begun in *Asia*: whereupon *Berenice* made this vow, that if he returned home again in safety, she would offer up her hair in *Venus* Temple. *Ptolomey* returned safe; and *Berenice*, according to her vow, cut off her hair and hung it up. After certain dayes, the hair was not to be found; whereupon *Ptolomey* the King was greatly displeased; but *Canon*, to please the humor of the King, and to curry favour with him, perswaded him that *Venus* had conveyed the Hair into Heaven. *Canon* attributeth seven Stars unto

unto it, but *Ptolomy* allotteth it but three, because the other be insensible.

6. **VIRGO**, the *Virgin*, it hath 26 Stars. This is affirmed to be Justice, which among all the Gods sometime living upon the Earth, did last of all forsake the same, because of the wickedness that began to multiply therein, and chose this place for her seat in Heaven.

Others say, that it was *Astræa*, the daughter of *Astreus*, one of the Gyants that were called *Titans*, who fighting, against the Gods, *Astræa* took their parts against her own Father, and was therefore after her death commended unto the Heavens, and made one of the 12 Signs,

Others say, that it was *Origone*, the daughter of *Icarinus*, who for that her Father was slain by certain drunken men, for very grief thereof hanged her self: but *Jupiter* taking pity of the *Virgin* for her natural affection, translated her into Heaven.

In her right wing there is one Star of special note, which by the Astronomers is called *Vindemiator*, (i.e.) the gatherer of Grapes. This was *Ampelos* the son of a Satyr and a Nymph, and greatly beloved of *Bacchus* unto whom in token of his love, *Bacchus* gave a singular fair Vine, planted at the foot of an Elm (as the manner was in old time.) But *Ampelos* in Harvest gathering Grapes, and taking little heed to his footing, fell down out of the Vine, and brake his neck. *Bacchus* in memorial of his former affection, translated him into Heaven, and made him one of the principal Stars in this Constellation. There is another great Star in the hand of the *Virgin*, called of the Latins *Spica*, of the Greeks *Stichus*, of the Arabians



bians *Azimech* (i. e.) the *Ear of Corn*: whereby they signifie, that when the Sun cometh to this Sign, the Corn waxeth ripe. *Albumazer* the Arabian, and *Novidius*, take this Constellation for the *Virgin Mary*. The unformed Stars in this Constellation are six.

7. *LIBRA* the *Ballance*, it containeth eight Stars, *Cicero* calleth *Jugum* the *Yoke*, and here it is to be noted, that the ancient Astronomers that first set down the number of the Constellations contained in the Zodiack, did account but eleven therein, so that the Sign, which now is called *Libra*, was heretofore called *Chelai*, that is to say, the *Claws of the Scorpion*, which possesseth the space of two whole Signs. But the latter Astronomers, being desirous to have 12 Signs in the Zodiack, called those eight, whereof the *Claws of the Scorpion* do consist, by the name of *Libra*, not that there was any Poetical Fiction to induce them thereto, but only moved by this reason, because the Sun joyning with this Constellation, the Day and the Night are of an equal length, and are (as it were) equally poyzed in a pair of Ballance. Yet (as I remember) some will have this to be the Ballance, wherein Justice, called also *Astrea*, weighed the deeds of mortal men, and therein presented them unto *Jupiter*. It hath 9 unformed Stars appertaining unto it.

8. *SCORPIO*, the *Scorpion*? called of the *Arabians*, *Alairab*; of *Cicero*, *Nepa*. It consisteth of 21 Stars. The Fiction is thus; *Orion* the son of *Hyrcus* greatly beloved of *Diana*, was wont to make his boast: that he was able to overcome what beast soever was bred upon the Earth: the Earth being moved with this speech brought forth the *Scorpion*, whereby *Orion* was

was stung to death. *Jupiter* thereupon (at the request of the Earth) translated both the *Scorpion* and *Orion* into Heaven; to make it a lesson for ever, for mortal men not to trust too much unto their own strength; and to the end he might signifie the great enmity between them, he placed them so in the Heaven, that whensoever the one ariseth, the other setteth; and they are never both of them seen together above the Horizon at once: *Gulielmus Postellus* will have it to be the *Serpent* which beguiled *Eve* in *Paradise*. The unformed Stars about this *Scorpion* are three.

9. *SAGITTARIUS*, the *Archer*. It hath 31 Stars. Touching this Sign, there are among the Poets many and sundry opinious. Some say that it is *Crocus*, the son of *Paphene*, that was nurse unto the Muses. This *Crocus* was so forward in learning of the Liberal Sciences, and in the practice of feats of Activity, that the Muses entreated *Jupiter* that he might have a place in Heaven. To whose request *Jupiter* inclining, made him one of the 12 Signs: And to the end that he might expresse the excellent qualities of the Man, he made his hinder parts like unto a Horse, thereby to signifie his singular knowledge in Horse-manship: and by his Bow and Arrow, he declared the sharpness of his Wit. Whereupon the Astrologers have this conceit, that he that is born under *Sagittarius*, shall attain to the knowledge of many Arts, and be of prompt wit, and great courage. *Virgil* affirmeth this to be *Chiron* the *Centaur*, who for his singular Learning and Justice was made the Master of *Achille*. At which time *Hercules* coming to visit him (for he had heard both of the worthiness of the School-master, and of the great hopes of the Scholar) brought

brought with him his quiver of Arrows dipped in the blood of the Serpent *Hydra*; but *Chiron* being desirous to see his shafts, and not taking heed of them being in his hand, let one of them fall upon his foot, and being greatly tormented, not only by the anguish of the poyson working in the wound, but much more because he knew himself to be immortal, and his wound not to be recovered by medicine, he was enforced to make request unto the Gods, that he might be taken out of the World, who pitying his case, took him up into Heaven, and made him one of the 12 Signs.

10. CAPRICORNUS, the *Goat*, it consisteth of 28 Stars. The Poets say, that this was *Pan* the God of the shepheards, of whom they feign in this manner: The Gods having war with the Gyants, gathered themselves together into *Aegypt*, *Typhon* the Gyant pursued them thither, whereby the Gods were brought in a quandary, that well was he that by changing his shape might shift for himself. *Jupiter* turned himself into a *Ram*: *Apollo* became a *Crow*: *Bacchus* a *Goat*: *Diana* lurked under the form of a *Cat*: *Juno* transformed her self into a *Cow*: *Venus* into a *Fish*: *Pan* leaping into the River *Nilus*, turneth the upper part of his body into a *Goat*, and the lower part into a *Fish*. *Jupiter* wondring at the strange device, would needs have that Image and Picture translated into Heaven, and made one of the 12 Signs. In that the hinder part of this Sign is like a *Fish*. It betokeneth that the latter part of the moneth wherein the Sun possesseth this Sign, inclineth unto Rain.

11. AQUARIUS, the *Waterman*: It hath 42 Stars whereof

whereof some make the Figure of the Man: other-  
 some the Water-pot; and some, the stream of wa-  
 ter that runneth out of the pot. This is feigned to  
 be *Ganimedes* the *Trojan*, the son of *Oros* and *Callirhoe*,  
 whom *Jupiter* did greatly love for his excellent fa-  
 vour and beauty, and by the service of his Eagle carri-  
 ed him up into Heaven, where he made him his Cup-  
 bearer, and called him *Aquarius*. Others notwith-  
 standing think it to be *Deucalion* the son of *Prome-  
 theus* whom the Gods translated into Heaven, in re-  
 membrance of that mighty deluge which hapned in  
 his time, whereby mankind was almost utterly taken  
 away from the face of the earth. The unformed stars  
 belonging unto this Sign are three.

12. *PISCES* the *Fishes*: these together with the  
 line that knitteth them together, contain 24 Stars,  
 The Poets say, that *Venus* and *Cupid* her son coming  
 upon a certain time unto the River *Euphrates*, and sit-  
 ting upon the bank thereof, upon a sudden espied *Ty-  
 phon* the *Gyant*, that mighty and fearful enemy of the  
 Gods coming towards them; upon whose sight, they  
 being stricken with exceeding fear, leapt into the River,  
 where they were received by two Fishes, and by them  
 saved from drowning. *Venus* for this good turn,  
 translated them into Heaven. *Gulielmus Postellus*  
 would have them to be two Fishes wherewith Christ  
 fed the 5000 Men. The unformed Stars of this Con-  
 stellation are four.

Thus have I briefly run over the Poetical reasons  
 of the Constellations: It remains now that I speak  
 of the *Milky way*.

*VIA LACTEA*, or *Circulus Lacteus*, by the  
 Latines so called; and by the Greeks *Galaxia*; and  
 by

by the English, the *Milky way*. It is a broad white Circle that is seen in the Heaven: in the North Hemisphere, it beginneth at *Cancer*, on each side the head thereof, and passeth by *Auriga*, by *Perseus*, and *Cassiopeia*, the *Swan*, and the head of *Capricorn*, the tail of *Scorpio*, the feet of *Centaur*, *Argo the Ship*, and so unto the head of *Cancer*. Some in a sporting manner do call it *Watling-street*, but why they call it so, I cannot tell; except it be in regard of the narrowness that it seemeth to have; or else in respect of that great high way that lyeth between *Dover* and *St. Albons*, which is called by our men, *Watling-street*.

*Ovid* saith, that it is the great Causey, and Highway that leadeth unto the Pallace of *Jupiter*, but he alledgeth not the cause of the whiteness; belike he would have us imagine that it is made of white Marble.

Others therefore alledge these causes: *Jupiter* having begotten *Mercury* of *Maia* the daughter of *Atlas*, brought the child when he was born, to the breast of *Juno* lying asleep: But *Juno* awaking threw the child out of her lap, and let the milk run out of her breast in such abundance, that (spreading it self about the Heaven) it made that Circle which we see. Others say, that it was not *Mercury*, but *Hercules*; and that *Juno* did not let the milk run out of her breast, but that *Hercules* suckt them so earnestly, that his mouth run over, and so this Circle was made.

Others say, that *Saturn* being desirous to devour his children, his wife *Ops* presented him with a stone wrapped in a clout, instead of his child: This stone stuck so fast in *Saturn* his throat as he would have swallowed it, that without doubt he had therewithal been choaked, had he not been relieved by his wife:

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who



who by pressing the milk out of her breasts saved his life : the milk that missed his mouth (whereof you must suppose some sufficient quantity) fell on the Heavens, and running along made this Circle:

*Dr. Hood Commenting upon Constellations saith* ; The Stars are brought into Constellations, for Instruction sake, things cannot be taught without names ; to give a name to every Star had been troublesome to the Master, and for the Scholar ; for the Master to devise, and for the Scholar to remember ; and therefore the Astronomers have reduced many Stars into one Constellation ; that thereby they may tell the better where to seek them ; and being sought, how to express them. Now the Astronomers did bring them into these Figures, and not into other, being moved thereto by these three reasons : first, these Figures express some properties of the Stars that are in them ; as those in the *Ram* to be hot and dry ; *Andromeda* chained betokeneth imprisonment, the head of *Medusa* cut off signifieth the loss of that part : *Orian* with his terrible and threatening gesture, importeth tempest and terrible effects. The *Serpent*, the *Scorpion*, and the *Dragon*, signifie poyson : The *Bull* insinuateth a melancholy passion : The *Bear* inferreth cruelty, &c. Secondly, the Stars (if not precisely, yet after a sort) do represent such a Figure, and therefore that Figure was assigned them. as for example, the *Crown*, both North and South, the *Scorpion*, and *Triangle*, represent the figures which they have. The third cause was the continuance of the memory of some notable Men, who either in regard of their singular pains taken in Astronomy, or in regard of some other notable deed, had well deserved of Man-kind.

The first Author of every particular Constellation is uncertain; yet are they of great antiquity; we receive them from *Ptolomy*, and he followed the *Platonicks*; so that their antiquity is great. Moreover, we may perceive them to be ancient by the Scriptures, and by the Poets. In the 38 Chapter of *Job* there is mention made of the *Pleiades*, *Orion*, and *Alturus*, and *Mazzaroth*, which some interpret the 12 Signs: *Job* lived in the time of *Abraham*, as *Syderocrates* maketh mention in his Book *de Commensuratione locorum distantiarum*:

Now besides all this, touching the reason of invention of these Constellations, the Poets in setting forth those Stories, had this purpose, to make men fall in love with Astronomy: When *Demosthenes* could not get the people of *Athens* to hear him in a matter of great moment, and profitable to the Commonwealth, he began to tell them a tale of a fellow that sold an Ass; by which tale he so brought on the *Athenians*, that they were both willing to hear his whole Oration, and to put in practice that whereunto he exhorted them. The like intent had the Poets in these Stories: They saw that Astronomy being for commodity singular in the life of Man, was almost of all men utterly neglected: Hereupon they began to set forth that Art under these Fictions; that thereby such as could not be perswaded by commodity, might by the Pleasure be induced to take a view of these matters, and thereby at length fall in love with them. For commonly note this, that he that is ready to read the Stories, cannot content himself therewith, but desireth also to know the Constellations, or at least wise some principal Star therein,

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